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07/30/2008 Can't annotate Takayuki ABE et al., S.N. 10/549,340 Page 3 RECEIVED CENTRAL FAX CENTER JUN 0 6 2008 Dkt. 1141/75034

cover sheetListing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

1. (currently amended) A magnetic resonance imaging apparatus including:

measurement control means for dividing a k space into a high repetitive-frequency measurement area containing an origin of the k space and measured at a high frequency repetitive-frequency and a plurality of low repetitive-frequency measurement areas not containing the origin and measured at a low repetitive-frequency, and obtaining k space data by repetiting measurement of said high repetitive-frequency measurement area and measurement of at least one of said low repetitive-frequency measurement areas between said measurements of the high repetitive-frequency measurement area in a predetermined measurement order;

signal processing means for reconstructing an image by using the k space data; and display means for displaying the resulting image;

wherein said signal processing means acquires a time phase evaluation value from said high repetitive-frequency measurement area, determines a time phase at which said time phase evaluation value reaches a predetermined threshold value or greater, and

said measurement control means rearranges the predetermined measurement order of some of said high repetitive-frequency measurement area and said at least one of said low repetitive-frequency measurement areas in such a manner that a measurement period of said high repetitive-frequency measurement area contains said time phase.

2. (currently amended) A magnetic resonance imaging apparatus according to claim 1,